

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a pedestrian traffic control signal in conjunction with geometric improvements at the intersection of Georgia Avenue (US 29) and Ellsworth Drive in Montgomery County, Maryland. Georgia Avenue is assumed to run in a North-South direction.

II. INTERSECTION OPERATION

The phasing operation will be concurrent phasing for Georgia Avenue. The pedestrian phase will be exclusive only. Ellsworth Drive will not be controlled by the signal.

III. CONTROLLER REQUIREMENTS

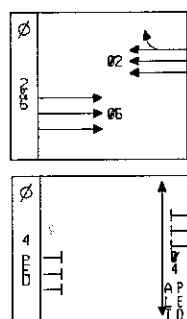
FULL-TRAFFIC ACTUATED, EIGHT PHASE CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "5" BASE MOUNTED CABINET.

IV. SPECIAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00-13, 104.00-19, 104.00-21-104.00-24, 104.17-01, 104.17-02, 104.39-02, 104.41-02, 104.48-01, 104.48-02, 104.49-01, 104.49-02, 104.81-01, 104.81-02.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING ALL CABLE TO THE CABINET AND SHALL PROPERLY LABEL EACH CABLE.
3. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
4. ALL DISCONNECTING AND CONNECTING OF TRAFFIC SIGNAL INTERCONNECT CABLE SHALL BE THE RESPONSIBILITY OF THE MONTGOMERY COUNTY DP&T. CONTACT MR. ROBERT GONZALES AT (240) 777-8761 AT LEAST 72 HOURS PRIOR TO INITIATING ANY CONSTRUCTION WORK

PHASE CHART AND PHASING DIAGRAM

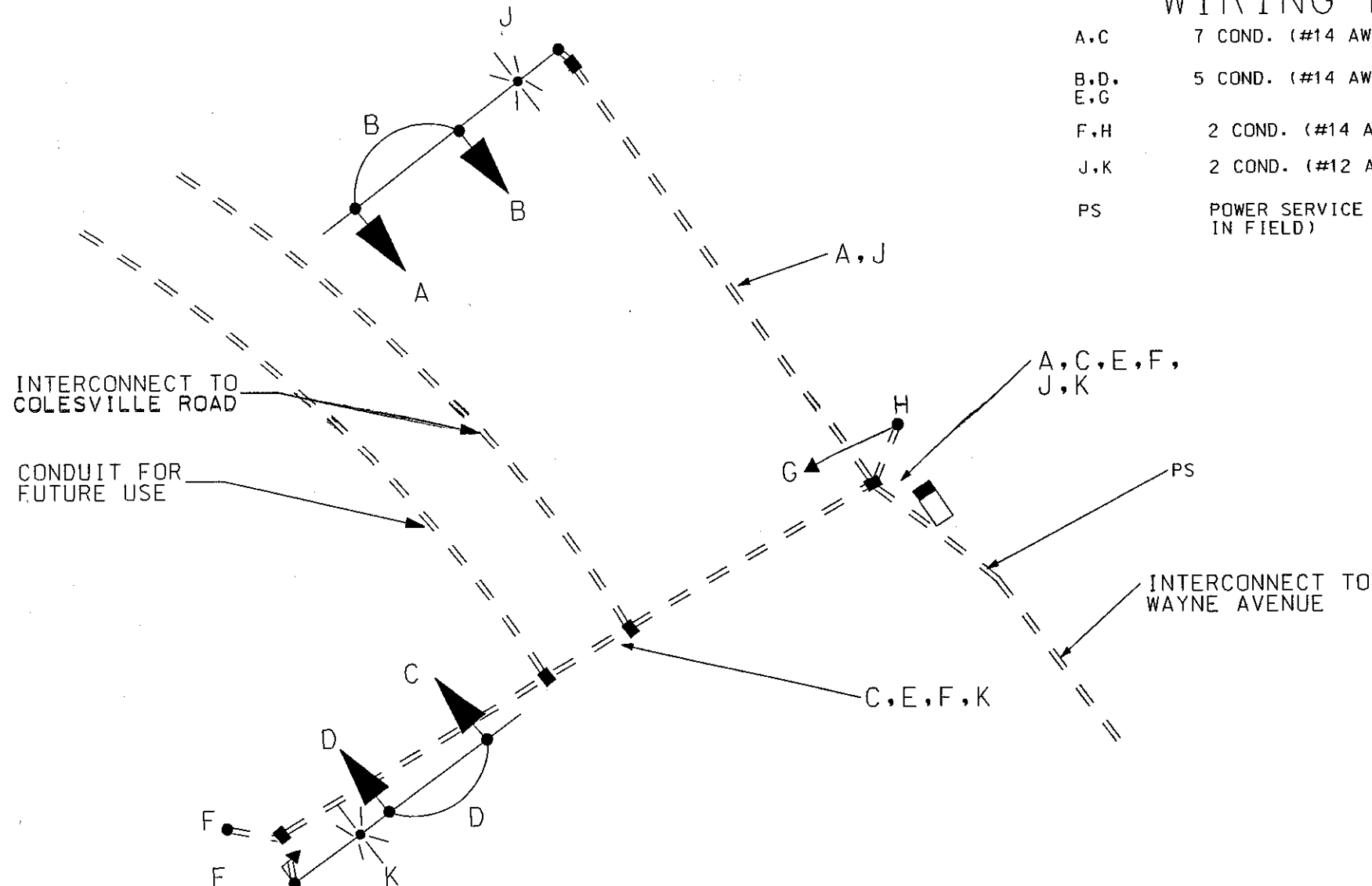
	1-4	5,6
	(R)	
	(Y)	
	(G)	
Phase 2 & 6	G	DW
2 & 6 Change	Y	DW
Phase 4 (Ped)	R	W
Ped Clear	R	FL/DW
Flashing	FL/Y	DARK
Operation		



WIRING DIAGRAM

WIRING LEGEND

- A,C 7 COND. (#14 AWG)  
B,D,E,G 5 COND. (#14 AWG)  
F,H 2 COND. (#14 AWG) (PUSH BUTTONS)  
J,K 2 COND. (#12 AWG) (TRAY CABLE)  
PS POWER SERVICE (TO BE DETERMINED IN FIELD)



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE STATE HIGHWAY ADMINISTRATION

QUANTITY	UNITS	CATEGORY CODE NO.	DESCRIPTION
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EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

QUANTITY	UNITS	CATEGORY CODE NO.	DESCRIPTION
35	SF	973023	Furnish sheet aluminum signs consisting of:  1 EA R6-1 (36"x24") 2 EA R3-2 (24"x24") 1 EA R1-1 (30"x30") 1 EA R10-11b (24"x324") 2 EA R10-4 (9"x12") 1 EA CUSTOM STREET NAME SIGN
1	EA	816110	Traffic Signal Cabinet NEMA Size 5
LS	LS	120500	Maintenance of Traffic
LS	LS	130850	Mobilization
2	CY	203030	Test pit excavation
7	CY	801004	Concrete for signal pole foundation
200	LF	805118	Furnish and install 4" schedule 80 PVC conduit (bored)
200	LF	805155	Furnish and install 4" schedule 80 PVC conduit (slotted)
20	LF	805125	Furnish and install 2" schedule 80 PVC conduit (trenched)
1450	LF	805135	Furnish and install 3" schedule 80 PVC conduit (trenched)
20	LF	805140	Furnish and install 4" schedule 80 PVC conduit (trenched)
7	EA	811091	Furnish and install electrical handhole
2	EA	813015	Install overhead sign
2	EA	837001	Furnish and install 3/4 in diameter X 10 ft. ground rod
12	EA	860200	12 in. vehicle signal head section
4	EA	860282	12 in. one way countdown pedestrian signal head section
1	EA	860292	Cut, clean, and galvanize signal structure
100	LF	861105	Furnish and install 2-conductor (#14 AWG) electrical cable
400	LF	861107	Furnish and install 5-conductor (#14 AWG) electrical cable
2	EA	865201	Furnish and install APS pedestrian push button assemblies and signs
2	EA	867204	Install 27' steel mast arm pole with 38' mast arm and anchor bolts (Note: four - 1 1/2 in. x 60 in. anchor bolts.)
400	LF	862101	7 conductor electrical cable (#14 AWG)
300	LF	862101	5 conductor electrical cable (#14 AWG)
1	EA	800000	14' breakaway pedestrian post.
1	EA	800000	5' pedestrian pedestal
1000	LF	800000	12 pair (No. 19 AWG) communications wire

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION. 7491 CONNELLEY DRIVE, HANDOVER, MARYLAND 21076.

QUANTITY	UNITS	CATEGORY CODE NO.	DESCRIPTION
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PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Design Division  
Phone # (410) 787-7630

Mr. Wayne Mowdy  
Asst. District Engineer - Maintenance  
Phone # (301) 513-7304

Mr. Lee Starkloff  
District Engineer - Traffic  
Phone # (301) 513-7358

Mr. Robert Gonzales  
Engineer III (Montgomery County)  
Phone # (240) 777-8761

Mr. Augustine Rebish  
Asst. District Engineer - Utility  
Phone # (301) 513-7350

Mr. Ed Rodenhizer  
Signal Shop Supervisor  
Phone # (410) 787-7652

REVISIONS



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
TRAFFIC SIGNAL INSTALLATION  
US 29(GEORGIA AVENUE) / ELLSWORTH DRIVE

DRAWN BY: WT/VLG  
CHECKED BY: LES  
SCALE: NTS  
DATE: 02-25-04

F.A.P. NO.  
S.H.A. NO.  
COUNTY: MONTGOMERY  
LOG MILE: 15002900.82

TS NO.  
4298  
T.I.M.S. NO.  
G071

SHEET NO.  
2 OF 2

WELLS & ASSOCIATES, LLC

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